

# The Effect Of Giving Bay Leaf Boiled Water On Lowering Blood Pressure In 1-Month Injectable KB Acceptors At The Nining Midwife Clinic In 2022

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Article Info	Abstract
<b>Keywords:</b> injectable family planning, hypertension	<p>Background: the use of injectable contraceptives can cause high blood pressure or hypertension because injectable contraceptives contain the hormone progesterone which can cause hypertension due to the content of Depoprovera Medroxy Progesterone Acetat (DMPA). To find out the influence of Pandan leaf decoction on blood pressure on 1-month injectable KB acceptors Di at the Nining midwife Clinic in 2022. The study was conducted in January-February at the Nining midwife Clinic in 2022. Method: this type of research is a pre-experimental research designs, this design is not a real experiment because there are still variables that contribute to the formation of the dependent variable. So the result of the experiment which is the dependent variable is not solely influenced by the independent variable. The population in this study is the entire acceptor KB injectable 1 month, the number of samples in this study as many as 17 acceptor KB injectable 1 month suffering from hypertension which shows that there is an effect of Pandan leaf decoction to decrease blood pressure in the acceptor KB injectable 1 month. Results: Hanalysis results obtained that 17 respondents had hypertension. The majority of respondents experienced Hypertension stage 1 as many as 12 people (70.6%), then who experienced pre hypertension 3 people (17.6%) and Hypertension stage 2 as many as 2 people (11.8%). The results of the analysis obtained blood pressure of respondents after consuming pandan leaf decoction majority of normal blood pressure as much as 15 people (88.2%) while Pre hypertension as much as 2 people (11.8%). There were changes in blood pressure in respondents who had previously experienced hypertension and after consuming pandan leaf decoction, the respondents ' blood pressure decreased by 15 people and 2 more people had decreased blood pressure but had not returned to normal completely. Conclusion: the results of this study can add insight and knowledge and can apply khususnya for family planning acceptor injection 1 month hypertension</p>
This is an open access article under the <a href="https://creativecommons.org/licenses/by-nc/4.0/">CC BY-NC</a> license	<b>Corresponding Author:</b> Lastrri Rian Sekolah Tinggi Ilmu Kesehatan Assyifa <a href="mailto:lastrikhayla01@gmail.com">lastrikhayla01@gmail.com</a>

## INTRODUCTION

Gerakan KB The National Family Planning movement is salah one kegiatan of the main activities in realizing keluarga a prosperous family through efforts to increase awareness

and peran serta community participation, approach the age of marriage, pengaturan birth control, pembinaan ketahanan family resilience development. Pernyataan di The above statement can improve and realize nkkbs (norma keluarga Kecil bahagia sejahtera) so dapat tercapai that a balance between pertumbuhan population growth and economic growth can be achieved ekonomi(BKKBN, 2004).

*World Health Organization* (WHO) tahunin 2009, couples usia of childbearing age in the world nearly 380 million couples run family planning (KB) and 65-75 million of them in developing countries using kontrasepsi hormonal contraception such as pills, injections and implants. Kontrasepsi hormonal contraceptives used can have pengaruh both positive and negative influences on various female organs. The use kontrasepsi of hormonal contraceptives is the most adalah cotrception injections yaitu sebesar amounted to 38.3% and pil sebanyak 27.7% of the pill (Antika, 2014) achievement peserta of Family Planning (KB) participants dari over ke time continues to increase. In tahun 2015 showed the number peserta of family planning participants in Indonesia as much as 60.9,9% pengguna of Family Planning users. Sebagian Most masyarakat Indonesian people who use cotrceptive devices kontrasepsi choose metode contraception methods that berdaya work for a long time (long term). Pemakaian alat kontrasepsi terbanyak The largest use of contraceptives alat is the use of injectable cotrception devices, which sebanyak is 31.2,2% (BKKBN, 2016). In Provinsi Jawa East Java province , the bahwa number pencapaian peserta of MKJP active family planning participants reached aktif MKJP sebesar 1.796.086 1,796,086 mothers or 29.37,37% of the target of 6,115,178.

About 15% of women using kontrasepsi injectable contraceptives suffer tekanan darah from high blood pressure (140/90mmHg). The high rate of hypertension in women causes the need to pay attention to factors that affect the occurrence of increased tekanan blood pressure in women. Some factors that affect tekanan blood pressure antara include: age, stress, race, medication, variasi diurnal and gender variations kelamin, and aktivitas physical activity. One of them that berhubungan erat is closely related to women is the use of this type alat of contraceptive. The use alat kontrasepsi yang berupa hormonal of hormonal contraceptives such as implanted, injectable and pill birth control is a type that can risk affecting the hormones in the tubuh wearer's body, because this birth ini control contains additional hormones that will be received by the body to delay pregnancy. content that contains estrogen is at risk of increasing tekanan blood pressure from several studies.

According to Wahdah (2011), management of hypertension can be done by means pengobatan of non-pharmacological treatment of penurunan weight loss, olah exercise, reduce asupan salt intake, do not smoke, avoid stress, turmeric (rhizome), pumpkin water (meat and fruit juice), selada watercress (all parts), ceplukan (all parts), alang-alang (root), Noni/pace (fruit), jeruk lime (fruit water), cat's whiskers (leaves), daun bay leaves. Daun salam (*Syzigium Polyanythum* (Wight) Walp.) is a leaf that is almost always present in masakan Indonesian cuisine. This leaf is also widely used in kuliner Asian culinary such as in Malaysia, Thailand and Vietnam, Daun bay leaves can be used dalam keadaan fresh or dried. In addition sebagai to being a spice, daun bay leaves actually have benefits for the health of the body , namely for penyakit diabetes, radang stomach inflammation, stroke and

blockage pembuluh of blood vessels (Winasis, 2015). Salam (*Eugenia polyantha*), the leaves are efficacious to overcome antihypertensi immunomodulatory antihypertensives, and diabetes (Purwanto, 2016). KandunganThe mineral content ada in daun bay leaves makes peredaran blood circulation menjadi lebih smoother and reduces tekanan darah high blood pressure Daun bay leaves also contain minyak esensial eugenol and metal kavikol essential oils, as well as ethanol which plays an active role as an anti-fungal and bacterial.and pengobatan pharmacological treatment there are several classes obat anti of antihypertensive drugs , namely diuretics,penghambat sympathetic inhibitors, betablockers, vasodilators, penghambat angiotensin conversionenzyme inhibitors, antagonis calcium antagonists and penghambatangiotensinII receptor blockers. (Savitri, 2016). Dikecamatan Tajinan itself precisely in PBM Nikmahtin of all pengguna KB injecting KB users about 12 people have increased tekanan blood pressure due to the use alat of contraceptives injected1 month.

Based latar belakang on the above background, the authors are interested in conducting research on “the effect of giving air rebusan bay leaf boiled water salam on reducing tekanan blood pressure in akseptor lama KB 1 month old acceptors of injectable KB bulanin 2022”.

## METHOD

The design used is *pre-experimental*. This *pre-experimental study* used the design of *one group Pretest Posttest*. menggunakan *purposive sampling* teknik pengumpulan data dengan mengobservasi tekanan darah, tensi meter dan lembar SOP. Data analysis using *Wilcoxon Test*. The sample in this study ini took all elementary units in the population or a number of 17 people.

## RESULTS AND DISCUSSION

### Characteristics Of Respondents

**Table 4.1** characteristics of respondents Aseptor KB injection 1 month hypertensive patients based on Blood Pressure age, education, Jobs at the Mutiara Health Center in 2022

No	Characteristics Of Respondents	N	%
1.	Age		
	22-28 years	old 11	64.8
	28-35 years	old 6	35.2
2.	Education		
	SD	SD2 11.8	11,8
	SMP/MTS	5	29.4,4
	SMA	7	41.1,1
	Perguruan College	3	17.6,6
2.	Jobs		
	IRT	10	58.8,8
	PNS	1	5.8,8
	Karyawan Private Employees	4	23,6,6
	Self-employed	2	11,8,8

No	Characteristics Of Respondents	N	%
	Total	17	100

(Source: Pengolahan Primary Data Processing, 2021)

Based on the results of Table 4.1 reviewed from the age of respondents aged 22-28 years amounted to 3 respondents (64.8%), age 28-35 years amounted to 6 respondents (60.0%) and the age of 35 years amounted to 1 respondent (35.2%). Respondents' last Education was divided into 4, namely elementary, junior high/MTS, senior high/MA and bachelor/Diploma. The number of respondents who have the last elementary education background is 2 people (11.8%), SMP/MTS is 5 people (29.4%), SMA/MA is 7 people (41.1%) while universities are 3 people (17.6%). The majority of respondents' jobs are Housewives, namely 10 people (58.8%), civil servants 1 person (5.8%), Private Employees 4 people (23.6%), self-employed 2 people (11.8%).

### Univariate Analysis

Distribution of acceptor KB injection 1 month hypertensive patients based on blood pressure before giving bay leaf decoction.

**Table 4.2** distribution of Aceptor KB injection 1 month hypertensive patients based on blood pressure before giving decoction Welcome to the clinic 2022

No.	Categories	Blood Pressure Categories	Of Respondents	%
1.2.3.4	Normal	120/80 mmHg	0	0,0
2.	Prehipertensi	120/80– 139/89 mmHg	3	17,6
3.	Hipertensi Stage 1	140/90– 159/ 99 mmHg	12	70,6
.	Hipertensi Stage 2	≥ 160/100 mmHg	2	11,8
	Jumlah		17	100

Based on Table 4.2 blood pressure of respondents before consuming bay leaf decoction. Blood pressure is divided into 4 categories, namely Normal, Pre hypertension, Hypertension stage 1 and Hypertension stage 2. The majority of respondents experienced Hypertension stage 1 as many as 12 people (70.6%), then who experienced pre hypertension 3 people (17.6%) and Hypertension stage 2 amounted to 2 people (11.8%).

**Distribution of acceptor KB injection 1 month hypertensive patients based on blood pressure after being given a decoction of bay leaf.**

**Table 4.3** distribution of acceptor KB injection 1 month hypertensive patients based on Blood Pressure After given decoction Welcome to the clinic 2022

No.	Categories	Blood Pressure Categories	Of Respondents	%
1.2.3.4	Normal	120/80 mmHg	15	88,2
2.	Prehipertensi	120/80– 139/89 mmHg	2	11,8
3.	Hipertensi Stage 1	140/90– 159/ 99 mmHg	0	0,0
.	Hipertensi Stage 2	≥ 160/100 mmHg	0	0,0
	Jumlah		17	100

Based on Table 4.3 blood pressure of respondents after consuming bay leaf decoction, the majority of respondents' blood pressure decreased and became normal by 15 people (88.2%) and prehypertension by 2 people (11.8%).

## Analisis Bivariate Analysis

**Table 4.4** effect of blood pressure acceptor KB injection 1 month in hypertensive patients before and after given a decoction of bay leaf water based on systolic and diastolic blood pressure in the clinic This Is The Year 2022.

Tekanan Darah	N	Mean	STD	SE	<i>t</i>	<i>P Value</i>
Sistol <i>Pre-Post</i>	17	172.4	18.55	19.50	19.50	0.000
Diastol <i>Pre-Post</i>	17	155.6	17.65	17.96	610.5	

Based on Table 4.4, it is explained that the average systole in hypertensive patients is 172.4 mmHg and the average diastole of hypertensive patients is 155.6 mmHg. It can be concluded that there is a significant difference in the average decrease in systolic and diastolic blood pressure in hypertensive patients before and after giving celery leaf decoction with a *p-value* of 0.000 <0.05.

## Discussion

### History of acceptor KB injection 1 month

Based on the results of Table 4.1 reviewed from the age of respondents aged 22-28 years amounted to 3 respondents (64.8%), age 28-35 years amounted to 6 respondents (60.0%) and the age of 35 years amounted to 1 respondent (35.2%). Respondents ' last Education was divided into 4, namely elementary, junior high/MTS, senior high/MA and bachelor/Diploma. The number of respondents who have the last elementary education background is 2 people (11.8%), SMP/MTS is 5 people ( 29.4%), SMA/MA is 7 people (41.1%) while universities are 3 people (17.6%). The majority of respondents ' jobs are Housewives, namely 10 people (58.8%), civil servants 1 person (5.8%), Private Employees 4 people (23.6%), self-employed 2 people (11.8%).

Based on Table 4.2 blood pressure of respondents before consuming bay leaf decoction. Blood pressure is divided into 4 categories, namely Normal, Pre hypertension, Hypertension stage 1 and Hypertension stage 2. The majority of respondents experienced Hypertension stage 1 as many as 12 people (70.6%), then who experienced pre hypertension 3 people (17.6%) and Hypertension stage 2 amounted to 2 people (11.8%). Based on Table 4.3 blood pressure of respondents after consuming bay leaf decoction, the majority of respondents ' blood pressure decreased and became normal by 15 people (88.2%) and prehypertension by 2 people (11.8%).

Based on Table 4.4, it is explained that the average systole in hypertensive patients is 172.4 mmHg and the average diastole of hypertensive patients is 155.6 mmHg. It can be concluded that there is a significant difference in the average decrease in systolic and diastolic blood pressure in hypertensive patients before and after giving celery leaf decoction with *p-value* 0.000 <0.05.

### Effect Of Water Decoction Of Bay Leaves On Lowering Blood Pressure

Research proves that there is a change between systolic and diastolic pressure after being given bay leaf decoction water therapy. From the analysis of the data obtained in Table 4.4, it is explained that with 17 samples, the average systolic blood pressure was 172.4/155.6 mmHg. These changes indicate that the bay leaf decoction water therapy is

very influential on blood pressure in hypertensive patients. Therapeutic effect of bay leaf boiled water on blood pressure in hypertensive patients has been done *Uji Statistik Wilcoxon* at the level of statistical significance Wilcoxon  $\alpha$  (0.05) with the value ( $p$ ) obtained by 0.000 with the help of computer spss 16. Because the value ( $p$ ) is smaller than the value ( $\alpha$ ). then  $H_0$  rejected  $H_1$  accepted, there is a significant change between the bay leaf boiled water to changes in blood pressure in hypertensive patients.

The therapeutic effect of bay leaf boiled water lowers blood pressure because it contains flavonoids that are able to function as anti-oxidants that are able to prevent the oxidation of body cells. The higher the oxide cells in the body, the higher a person to suffer from high blood pressure. By consuming bay leaf boiled water a day 2 times  $\frac{1}{2}$  glass of routine every day can help reduce stress hormones, relax arterial muscles. In addition, the mineral content in bay leaves makes blood circulation smoother and can also reduce high blood pressure. Bay leaves contain flavonoids that function as antioxidants that are able to prevent the occurrence of body cell oxides. The higher the oxides of cells in the body. the higher a person to suffer from degenerative diseases the content of flavonoids in bay leaves can be used to prevent hypertension (Ali.et, al, 2011).

## CONCLUSION

From the results of research on the effect of giving bay leaf decoction on reducing hypertension at the Nining midwife Clinic in 2022, it was found that: Before consuming bay leaf decoction. The results of the analysis obtained that 17 respondents acceptor kb injection 1 month experiencing hypertension. Blood pressure is divided into 4 categories, namely Normal, Pre hypertension, Hypertension stage 1 and Hypertension stage 2. The majority of respondents experienced Hypertension stage 1 as many as 12 people (70.6%), then who experienced pre hypertension 3 people (17.6%) and Hypertension stage 2 amounted to 2 people (11.8%). After consuming bay leaf decoction, The results of the analysis obtained 17 respondents acceptor kb injection 1 month hypertension. Tekanan Blood pressure of respondents after consuming rebusan daun bay leaf decoction the majority tekanan darah of respondents ' blood pressure decreased and became Normal 15 people (88.2,2%), and prehypertension as many as 2 people (11.8%). There Is An Effect Of Giving Rebusan Bay Leaf Boiled Water To Decrease Tekanan Blood Pressure In The Acceptor SuntikOf 1 Month Injectable Family Planning In Klinik Bidan Nining Midwife Clinic Year 2022.

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